

Making Pregnancy and Childbirth Safer

Nearly 600,000 women die of pregnancy-related causes each year. Ninety-nine percent of these deaths occur in the developing world. Many of these deaths can be prevented, however, by increasing awareness of the problem and by making appropriate interventions.

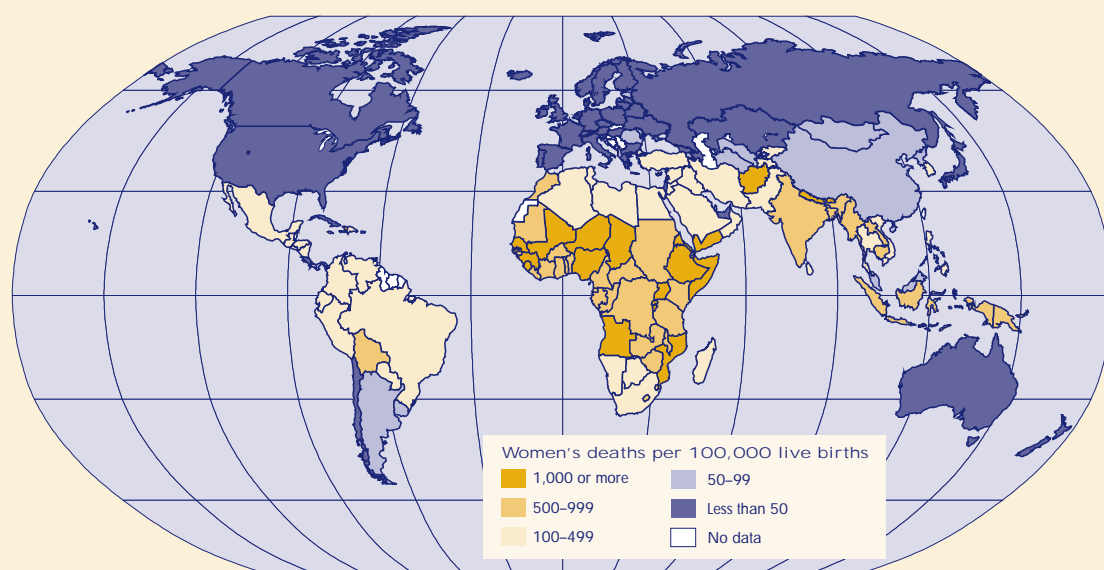
A woman's lifetime risk of dying from pregnancy-related complications or during childbirth is one in 48 in the developing world, versus only one in 1,800 in the developed world. The risk of dying from pregnancy-related causes is highest in Africa, both because African women are pregnant more often than women on other continents

and because risks are greater with each pregnancy (see Figure 1). Because of the much larger population, however, each year the majority of maternal deaths take place in Asia.

Interventions can improve the chances of women's survival and can also save many of the 3 million to 4 million babies who die annually in the first month of life. Existing health services have contributed to dramatic declines in infant mortality over the past 30 years, but maternal mortality ratios have not improved. The majority of complications that cause maternal deaths cannot be averted simply by improving women's overall health or nutritional status.

Figure 1

WOMEN'S DEATHS RELATED TO PREGNANCY AND CHILDBIRTH BY COUNTRY



Source: Population Reference Bureau, 1997 World Population Data Sheet, 1997.

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What causes maternal deaths?

Maternal deaths have both direct and indirect causes. About 80 percent of maternal deaths are due to direct causes, which include obstetric complications such as severe bleeding, infection, unsafe abortion, hypertensive disorders, and obstructed labor. Women also die of indirect causes such as malaria, diabetes, hepatitis, and anemia (see Figure 2). These causes are aggravated by pregnancy.

The environment in which women live influences maternal health. Maternal deaths are strongly associated with substandard health services and the unavailability of medical supplies at the time of labor, delivery, and immediately after birth. Women may also delay or not seek treatment because of logistical, social, or cultural barriers.

Most births in developing countries—about 60 percent—take place outside health facilities. Births at home need not be unsafe,

provided that a woman's family and her birth attendant can recognize the signs of labor and delivery complications and, if complications occur, move her to a facility where trained professionals can provide adequate care. In far too many cases, however, women are not brought to facilities in time. The warning signs of complications may not be recognized, or families may fear being treated badly, charged high fees, or receiving substandard care at such health facilities. Even deliveries in health facilities may be needlessly risky because the quality of obstetric care is inadequate.

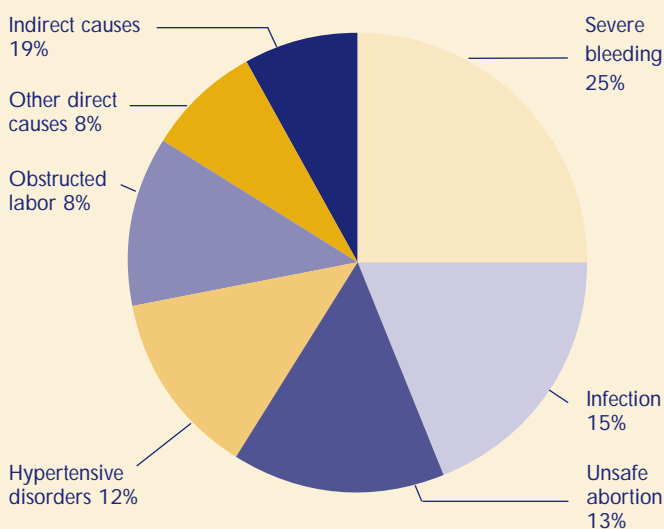
What are the consequences?

A mother's death has profound consequences for her family: In some developing countries, if the mother dies, the risk of death for her children under age 5 is doubled or tripled. In addition, because these women are stricken during their most productive years, their deaths have a profound impact on society and the economies of their nations.

Furthermore, for every maternal death, many more women suffer from injuries, infections, and disabilities related to pregnancy and childbirth. Studies show that women bear injuries as distressing as ruptures of the uterus, pelvic inflammatory disease, and fistula—damage to the reproductive tract, which can lead to incontinence if not repaired—as a consequence of childbirth. The World Health Organization (WHO) estimates that more than 15 million women per year fall victim to untreated injuries that occur during pregnancy and childbirth.

The World Bank and WHO estimate the cost per person of disability and untimely deaths in order to measure the cost-effectiveness of various health interventions. "Disability-adjusted life years," or DALYs, are the measure used to express how a healthy life is affected by disease. This measure combines the years lost because of

Figure 2
MEDICAL CAUSES OF MATERNAL DEATHS



Source: Ann G. Tinker and Marjorie A. Koblinsky, *Making Motherhood Safe* (World Bank Discussion Paper no. 202, 1993).

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premature death and disability. Women in the developing world lose more DALYs—28 million—to maternal causes than to any other cause (see Figure 3).

What can be done to make pregnancy and childbirth safer?

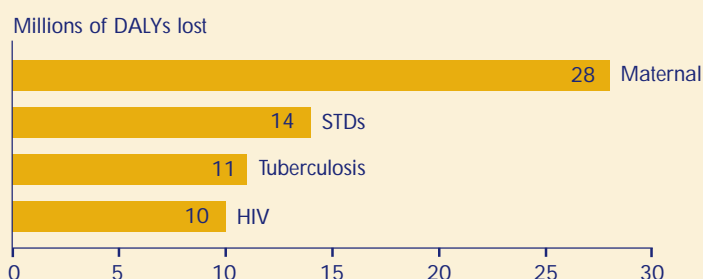
Maternal deaths can be prevented with existing knowledge and technology. Because all pregnant women face some unpredictable risks—15 percent of pregnant women will require medical care in order to avoid death or disability—they need to be able to recognize the symptoms of complications and have access to medical care when complications arise. Governments that wish to make pregnancy and childbirth safer can take some basic steps.

Increase access to family planning methods. Family planning can prevent many maternal deaths by helping women prevent unintended pregnancies and by reducing their exposure to the risks involved in pregnancy and childbirth. Family planning allows women to delay motherhood, space births, prevent unsafe abortions, protect themselves from sexually transmitted diseases—including HIV/AIDS—and stop childbearing when they have reached desired family size.

Improve the quality of prenatal care. Most women in developing countries now receive some kind of health care during pregnancy, but this care is not always effective. Prenatal care should include screening and treatment for STDs and anemia, as well as detection and treatment of pregnancy-induced hypertension. Recent studies suggest that taking low-dose vitamin A supplements during pregnancy can reduce maternal mortality. Prenatal counseling also gives women information about appropriate diet and other healthy behaviors and about where to seek care for pregnancy complications.

Ensure recognition of complications of pregnancy and delivery. Many women, especially in rural areas, live far from sources of adequate obstetric care. Families and birth attendants need to be aware of the warning signs of complications and must act quickly

Figure 3
TOP CAUSES OF DISABILITIES AMONG WOMEN, AGES 15 TO 44, IN DEVELOPING COUNTRIES



Source: World Bank Development Report, 1993.

to get women in need to health facilities. Wherever possible, communities should have specific plans for transporting women who suffer complications during childbirth.

Ensure access to essential obstetric care. Trained midwives can manage or stabilize some complications—for example, by providing women with antibiotics for infections or with injections to prevent excess bleeding. Midwives can also have an important role in community education and providing referrals to health facilities.

To deal with the most serious complications, a facility should be able to provide most or all of the elements of “essential obstetric care,” which includes the ability to perform surgery and provide anesthesia, blood transfusions, management of problem pregnancies (for example, women with anemia or hypertension), and special care for newborns. This care requires adequately

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trained professional staff, logistical support (to make sure intravenous drugs and other supplies are available when needed), and good supervision. Standard protocols for managing complicated deliveries can guide and coordinate the actions of health professionals.

Provide post-abortion care. Many women die of complications related to unsafe abortions. Unsafe abortion accounts for about 13 percent of maternal deaths worldwide, and in some countries, the percentage is much higher. Even in countries where abortion is legal, the services are often difficult to obtain because of the stigma attached to abortion, and because of the cost of the services. Women who have unsafe abortions need access to care to treat complications, such as infections, incomplete abortions, hemorrhages, and injuries to the cervix and uterus.

Provide postpartum care for mother and baby. Immediate postpartum care can detect and manage problems arising after delivery, such as hemorrhage, infection, and problems with breastfeeding.

Raise awareness of safe motherhood. Implementing a safe motherhood program requires commitment in the public and private health sectors, as well as at the community level. A lack of political commitment at either the national or local level can undermine efforts to strengthen safe motherhood programs. The Safe Motherhood Initiative, launched in 1987 by UNFPA, the World Bank, and WHO, seeks to raise awareness about maternal mortality and to find solutions. This initiative, which has since been joined by UNICEF, UNDP, IPPF, and the

Population Council, sponsored a technical meeting in 1997 to reaffirm the commitment to reducing maternal mortality.

Pregnancy and childbirth can be safer.

Implementing the steps outlined above requires resources and sustained effort, but can result in many saved lives. In Sri Lanka, for example, the maternal mortality ratio dropped dramatically—from 555 deaths per 100,000 live births in the 1950s, to 240 in the 1960s, to 30 in 1994. A nationwide extension of the health care system and expansion of midwifery skills are credited with this decline. Sri Lanka has had a major increase in the proportion of births attended by trained personnel, and in 1996, over 94 percent of births occurred in local hospitals. In a rural area of Bangladesh, a research project provided a combination of interventions, which may have contributed to a decline in maternal mortality ratios. The project increased women's access to midwives in rural clinics, community health workers, maternal and child health professionals, a larger district hospital, and emergency transportation. The midwives and community health workers taught families about the warning signs of complications, and how women could be transported for care in cases of emergencies. Boats served as ambulances to bring women with serious complications to facilities staffed by physicians 24 hours a day. Women who required surgery were referred to obstetric facilities at the district hospital. In many other countries, improvements in health services are being linked with community education about maternal health.

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